

Article 5: Fire Protection and Prevention

Division 81: High-Piled Combustible Storage

*("High-Piled Combustible Storage"
added 1-8-1996 by O-18242 N.S.)*

§55.8102 General Fire-Protection and Life-Safety Features

8102.1 General through 8102.7 Curtain Boards. Sections 8102.1 through 8102.7 of the C.F.C. (2001 Edition) have been adopted without change pursuant to section 55.0101(a).

8102.7.1. General through 8102.11 Portable Fire Extinguishers. Sections 8102.7.1 through 8102.11 of the C.F.C. (2001 Edition) have been adopted without change pursuant to section 55.0101(a).

TABLE 81-A "GENERAL FIRE-PROTECTION AND LIFE-SAFETY REQUIREMENTS" TO SAN DIEGO MUNICIPAL CODE SECTION 55.8102, AS FOLLOWS

COMMODITY CLASS	SIZE OF HIGH PILED STORAGE AREA ¹ (sq.ft.) (see Section 8102.3)	ALL STORAGE AREAS (See Section 81.02, 8103 and 8104 ²)						SOLID-PILED STORAGE, SHELF STORAGE AND PALLETIZED STORAGE(See Section 8101.3)		
		Automatic Fire-Extinguishing System (See Section 8102.3)	Fire-Detection System (see Section 8102.4)	Building Access (See Section 8102.5)	Smoke and Heat Removal (See Section 8102.6)	Curtain Boards (See Section 8102.7)	Small Hose Valves & Stations (See Section 8102.8)	Maximum Pile Dimension (ft)	Maximum Permissible Storage Height ⁵ (ft)	Maximum Pile Volume (cu.ft)
	x 0.0929 for m ²							x 3048 for mm		x 0.0283 for m ³
	0-500	NR	NR	NR ⁶	NR	NR ³	NR	NR	NR	NR
	501-2,500	NR	Yes	NR ⁶	NR	NR ³	NR	100	40	100,000
	2,501-12,000 public Accessory	Yes	NR	NR ⁶	NR	NR ³	NR	100	40	400,000

TABLE 81-A "GENERAL FIRE-PROTECTION AND LIFE-SAFETY REQUIREMENTS" TO SAN DIEGO
MUNICIPAL CODE SECTION 55.8102, AS FOLLOWS

	2,501-12,000 Nonpublic Accessible (Option 1)	Yes	NR	NR ⁶	NR	NR ³	NR	100	40	400,000
	2,501-12,000 Nonpublic Accessible (Option 2)	NR	yes	Yes	Yes	Yes	Yes	100	30 ⁷	200,000
	12,001-20,000	Yes	NR	Yes	Yes	NR ³	Yes	100	40	400,000
	20,001-500,000	Yes	NR	Yes	Yes	NR ³	Yes	100	40	400,000
	Greater than 500,000 ⁸	Yes	NR	Yes	Yes	NR ³	Yes	100	40	400,000
High Hazard	0-500	NR	NR	NR ⁶	NR	NR ³	NR	50	NR	NR
	501-2,500 Public accessible	Yes	NR	NR ⁶	NR	NR ³	NR	50	30	75,000
	501-2,500 Nonpublic accessible (Option 1)	Yes	NR	NR ⁶	NR	NR ³	NR	50	30	75,000
	501-2,500 Nonpublic accessible (Option 2)	NR	Yes	Yes	Yes	Yes	Yes	50	30	50,000
	2,501-300,000	Yes	NR	Yes	Yes	NR ³	Yes	50	30	75,000

TABLE 81-A “GENERAL FIRE-PROTECTION AND LIFE-SAFETY REQUIREMENTS” TO SAN DIEGO MUNICIPAL CODE SECTION 55.8102, AS FOLLOWS

	300,001- 500,000 ^{8,9}	Yes	NR	Yes	Yes	NR ³	Yes	50	30	75,000
--	------------------------------------	-----	----	-----	-----	-----------------	-----	----	----	--------

NR = Not Required

¹The size of the high-piled storage Area to be considered when using this table shall include the high-piled storage area and all portions of the building not separated from the high-piled storage area in accordance with Section 8102.2.

²For aisles, see Section 8102.9.

³ Curtain boards shall be installed as required by the Building Code, See U.B.C Section 906.

⁴ Piles shall be separated by aisles complying with Section 8102.9.

⁵ For storage in excess of the height indicated, special fire protection shall be provided in accordance with Footnote 8 when required by the chief. See also Article 79 and 88 for special limitations for flammable and combustible liquids and aerosols.

⁶ Section 902.2 shall apply for apparatus access.

⁷ For storage exceeding 30 feet (914 mm) in height, Option 1 shall be used.

⁸ Special fire-protection provisions such as, but not limited to, fire protection of exposed steel columns; increased sprinkler density; additional in-rack sprinklers, without associated reductions in ceiling sprinkler density; or additional fire department hose connections shall be provided when required by the chief.

⁹ High-piled storage areas shall not exceed 500,000 square feet (46451.5m²). A two-hour area separation wall shall be used to divide high-piled storage exceeding 500,000 square feet (46451.5m²) in area

TABLE 81-B “REQUIREMENTS FOR CURTAIN BOARDS AND SMOKE VENTING “TO SAN DIEGO MUNICIPAL CODE SECTION 55.8102, AS FOLLOWS”

COMMODITY CLASSIFICATION	Designated Storage Height (feet) ¹	Curtain Board Depth (feet) ¹	Maximum Area Formed by Curtain Boards (sq.ft) ³	Vent Area to Floor Area Ratio	Maximum Spacing of Vent Centers (feet) ¹	Maximum Distance to Vents From Wall or Curtain Boards (feet)
-----------------------------	--	--	--	-------------------------------------	--	---

TABLE 81-B "REQUIREMENTS FOR CURTAIN BOARDS AND SMOKE VENTING "TO
SAN DIEGO MUNICIPAL CODE SECTION 55.8102, AS FOLLOWS"

I-IV (option 1) Unsprinklered	20 or less	6	10,000	1:100	100	60
	Over 20-40	6	8,000	1:75	100	60
I-IV (option 2) Unsprinklered	20 or less	4	3,000	1:75	100	55
	Over 20-40	4	3,000	1:50	100	50
I-IV (Option 3) Sprinklered	20 or less	NR	NR	1:50	100	50
	Over 20-30	NR	NR	1:40	90	45
V (Option 1) Unsprinklered	20 or less	6	6,000	1:50	100	50
	Over 20-30	6	6,000	1:40	90	45
	30 or more	4	2,000	1:30	75	40
V (option 2) Sprinklered	20 or less	NR	NR	1:40	100	NR
	Over 20-30	NR	NR	1:30	90	NR

¹ x 3048 for mm² x 0.0929 for m³ The distance specified in the maximum distance from any vent in a particular curtained area to walls or curtains boards which form the perimeter of the curtained area.*(Amended 9-24-2002 by O-19103 N.S.)*